

CLAIMS

1. A reciprocating compressor, comprising:
 - a cylinder block having formed therein a plurality of cylinders;
 - pistons that make reciprocal movement inside said cylinders;
 - a first cylinder head fixed to one end of said cylinder block via a valve plate;
 - a second cylinder head fixed to another end of said cylinder block via a valve plate;
 - a first delivery chamber formed at said first cylinder head, into which a working fluid let out from a first compression space formed toward one end inside each of said cylinders is guided;
 - a second delivery chamber formed at said second cylinder head, into which a working fluid let out from a second compression space formed toward another end inside each of said cylinders is guided;
 - a plurality of delivery passages formed at said cylinder block; and
 - a outlet port located at said cylinder block or said cylinder head, which communicates between one of said delivery passages and an external circuit, with said other delivery passage that does not communicate with said outlet port made to communicate with said first delivery chamber and said second delivery chamber and also made to communicate via a guide passage with said delivery passage in communication with said outlet port,
 - wherein said delivery passage in communication with said outlet port is made to communicate with at least either said first delivery

chamber or said second delivery chamber via a constricted portion having a smaller passage section than the passage section at areas where said other delivery passage communicates with said first delivery chamber and said second delivery chamber; and

wherein the dimensions of said constricted portion are set so as to achieve an area equal to or less than the area of a circular section with a diameter of 1.5 mm.

2. A reciprocating compressor according to claim 1,

wherein said delivery passage in communication with said outlet port is formed at a position higher than said other delivery passage.

3. A reciprocating compressor, comprising:

a cylinder block having formed therein a plurality of cylinders;
pistons that make reciprocal movement inside said cylinders;
a first cylinder head fixed to one end of said cylinder block via a valve plate;

a second cylinder head fixed to another end of said cylinder block via a valve plate;

a first delivery chamber formed at said first cylinder head, to which a working fluid let out from a first compression space formed toward one end inside each of said cylinders is guided;

a second delivery chamber formed at said second cylinder head, into which a working fluid let out from a second compression space formed toward another end inside each of said cylinders is guided;

a plurality of delivery passages formed at said cylinder block; and

a outlet port located at said cylinder block or either of said cylinder heads, which communicates between one of said delivery passages and an external circuit, with said other delivery passage that does not communicate with said outlet port made to communicate with said first delivery chamber and said second delivery chamber and also made to communicate via a guide passage with said delivery passage in communication with said outlet port,

wherein said other delivery passage is made to communicate with said first delivery chamber in said second delivery chamber via a constricted portion having a relatively small passage section.

4. A reciprocating compressor, according to claim 3,

wherein the length of the path extending from said first delivery chamber to said guide passage and the length of the path extending from said second delivery chamber to said guide passage are set substantially equal to each other.

5. A reciprocating compressor, according to claim 3,

wherein the length of said first delivery chamber along the axial direction and the length of said second delivery chamber along the axial direction are set substantially equal to each other.

6. A reciprocating compressor, according to claim 1 or claim 3, wherein said constricted portion is formed at a valve plate.
7. A reciprocating compressor according to claim 1 or claim 3, wherein that said constricted portion is formed at said cylinder block.
8. A reciprocating compressor according to claim 1 or claim 3, wherein that said constricted portion is formed as a gap between said cylinder block and a valve or a gasket disposed between said cylinder block and a valve plate.
9. A reciprocating compressor according to claim 3, wherein that said constricted portion is formed at said outlet port or at a position immediately preceding said outlet port.